

Iowa Department of Natural Resources  
Wastewater Section  
Construction Permit Application  
**SCHEDULE K1, Controlled Discharge Pond**

|                      |                         |                |
|----------------------|-------------------------|----------------|
| <b>DATE PREPARED</b> | <b>PROJECT IDENTITY</b> | <b>DNR USE</b> |
|                      |                         | PROJECT NO.    |
| <b>DATE REVISED</b>  |                         | PERMIT NO.     |

  

1. Design Basis                      AWW-180                      PHWW  
     Flow, MGD                      \_\_\_\_\_  
     BOD<sub>5</sub>, #/day                      \_\_\_\_\_
  
2. No. of soil borings taken \_\_\_\_\_ Data included in the \_\_\_\_\_  
     High groundwater elevation (MSL) \_\_\_\_\_
3. Top of dike elevation (MSL) \_\_\_\_\_ ft. 100 year flood elevation (MSL) \_\_\_\_\_ ft
  
4.
 

| <u>Pond Data</u>                      | <u>Cell<br/>No. 1</u> | <u>Cell<br/>No. 2</u> | <u>Cell<br/>No. 3</u> | <u>Cell<br/>No. 4</u> | <u>Total</u> |
|---------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------|
| Surface area @ maximum depth (A)      | _____                 | _____                 | _____                 | _____                 | _____        |
| Loading (#BOD <sub>5</sub> /acre/day) | _____                 | _____                 | _____                 | _____                 | _____        |
| Maximum operation depth (ft)          | _____                 | _____                 | _____                 | _____                 | _____        |
| Minimum operation depth (ft)          | _____                 | _____                 | _____                 | _____                 | _____        |
| Effective storage volume (MG)         | _____                 | _____                 | _____                 | _____                 | _____        |
| Effective detention time (days)       | _____                 | _____                 | _____                 | _____                 | _____        |
| Freeboard @ maximum depth (ft)        | _____                 | _____                 | _____                 | _____                 | _____        |
| Top width of dike (ft)                | _____                 | _____                 | _____                 | _____                 | _____        |
| Inner embankment slope H/V            | _____                 | _____                 | _____                 | _____                 | _____        |
| Outer embankment slope H/V            | _____                 | _____                 | _____                 | _____                 | _____        |
| Inlet depression diameter (ft)        | _____                 | _____                 | _____                 | _____                 | _____        |
| Top drawoff level (ft)                | _____                 | _____                 | _____                 | _____                 | _____        |
| Middle drawoff level (ft)             | _____                 | _____                 | _____                 | _____                 | _____        |
| Bottom drawoff level (ft)             | _____                 | _____                 | _____                 | _____                 | _____        |
  
5. Method of raw flow diversion to cells \_\_\_\_\_  
     Are the locations of piping and structures given on Schedule H1? Yes ☐ No ☐
  
6. Method of interconnection of cells \_\_\_\_\_
  
7. Provision to prevent drawoff of floating solids \_\_\_\_\_
  
8. Method of sampling \_\_\_\_\_
  
9. Type of flow measurement: Influent \_\_\_\_\_ Effluent \_\_\_\_\_
  
10. Fence height \_\_\_\_\_ No. strands of barbed wire: Top \_\_\_\_\_ Bottom \_\_\_\_\_
  
11. Number of warning signs \_\_\_\_\_ Location \_\_\_\_\_
  
12. Will pond be pre-filled to two-ft. level? Yes ☐ No ☐
  
13. Maximum allowable leakage rate \_\_\_\_\_ in/day  
     Method of testing leakage rate \_\_\_\_\_
  
14. Are specifications included for:
 

|    |                        |                              |                             |
|----|------------------------|------------------------------|-----------------------------|
| a. | Seeding                | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| b. | Soil sterilization     | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| c. | Pond bottom uniformity | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| d. | Pond sealing           | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| e. | Erosion protection     | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
  
15. Is service bypass provided? \_\_\_\_\_ Discharge to \_\_\_\_\_